YB-60 Emulator

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The program is run exactly as specified in the program document.

1. Starting the program with an object file as an argument will load that into the emulator.
2. Typing in the address will print what exists at that location.
3. Typing in 2 addresses with a "." between them will print all the data between those 2 locations.
4. Typing in a address with a ":" then bytes with spaces between them will replace anything after that address with the data entered in.
5. Typing in a address followed by an R will run all the code starting at that address.
6. You can exit the program by entering "exit" ctrl-C or ctrl-D.

Testing:

I tested the program by starting it with some of the provided object files and comparing the output with the correct output that was provided.

If there is a checksum error the program outputs an exit error and quits the program.

```
PS C:\Users\101060665\Documents\repos\CENG 325\YB-60 Emulator> python3 main.py test3.obj
Format input error.  test3.obj
PS C:\Users\101060665\Documents\repos\CENG 325\YB-60 Emulator>
```

Checking proper output of test1.obj and the first 2 functions.

```
PS C:\Users\101060665\Documents\repos\CENG 325\YB-60 Emulator> python3 main.py test1.obj
>300
A9
>300.30F
300    A9 01 85 00 A5 00 8D 00
308    80 06 00 4C 04 02 00
>exit
PS C:\Users\101060665\Documents\repos\CENG 325\YB-60 Emulator>
```

Checking output with test2.obj.

```
PS C:\Users\101060665\Documents\repos\CENG 325\YB-60 Emulator> python3 main.py test3.obj
Format input error.  test3.obj
12208    80 E6 00 4C 04 02 00
>300: A9 04 85 07 A0 00 84 06 A9 A0 91 06 C8 D0 FB E6 07
>300.310
300    A9 04 85 07 A0 00 84 06
308    A9 A0 91 06 C8 D0 FB E6
>200R
  PC        OPC    INST    Rd    Rs1    Rs2
00200
```

The 0PC, INST, Rd, Rs1, Rs2 are all empty because those parts of the emulator haven't been created yet.